

RAW SEQUENCE LISTING

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Application Serial Number: 10/750, 623
Source: TFW0
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RAW SEQUENCE LISTING DATE: 08/30/2005
PATENT APPLICATION: US/10/750,623 TIME: 09:51:20

Input Set : D:\MMI1100-1.txt
Output Set: N:\CRF4\08302005\J750623.raw

3 <110> APPLICANT: MMI GENOMICS, INC.
4 DeNISE, Sue K.
5 KERR, Richard
6 ROSENFIELD, David
7 HOLM, Tom
8 BATES, Stephen
9 FANTIN, Dennis
11 <120> TITLE OF INVENTION: METHODS AND SYSTEMS FOR INFERRING BOVINE TRAITS
13 <130> FILE REFERENCE: MMI1100-1
15 <140> CURRENT APPLICATION NUMBER: US 10/750,623
16 <141> CURRENT FILING DATE: 2003-12-31
18 <150> PRIOR APPLICATION NUMBER: US 60/437,482
19 <151> PRIOR FILING DATE: 2002-12-31
21 <160> NUMBER OF SEQ ID NOS: 64922
23 <170> SOFTWARE: PatentIN version 3.1
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26 <211> LENGTH: 600
27 <212> TYPE: DNA
28 <213> ORGANISM: Bovine MMBT02545
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35 cggattaaag aaacaatcca atggtgacaa agaaatattt ataacataaa tcataattaa 180
37 atatttagata aataaaacata aaaataatgt cccaaaaggta ttcccaagaa agacaattta 240
39 atggacaaag gcagggatat atatgaatgc ttaaatggtt tcatgaatat tgattagctr 300
41 gatTTTTTTT agtgttgag tgaaggagta gtatgtgag ggacaaaaagt gatggaccga 360
43 aatctgagtt ttatggTTT tcagataaaat acgcattttt gtttatttac acagagagat 420
45 attgtcctac taatatgata tctccaccag gcccattaaa acttatgtgc taacctctgt 480
47 ttacacatt aacgacaaac aggacataac gcttcgtcac gaaaggaaac acataactgag 540
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62 gcccatgact gtgtgcacg tacctcgaaat atggggaaat cgtttctcat caattgtacc 180
64 ttttagcgca aaagttctt aagctgtagg tgcagaagag attgtcccaat tctgacagat 240
66 ggagaaaactg aggcagagag gacgaagggc ttgttccctc atcagagcta gagagcagay 300
68 gtgtttcata tttttttcc tcagactacg tttttccacc tgctactgtt aaggaccctca 360
70 ccaagtttat gaccctaaaa atgtctttta tttcttaaaa tccaaaagta ataattaata 420
72 gccccaaagaa ctttagtgccca ctgcagctgc tgaggccagg aacggttact cggttaggagc 480

CP9-6-2

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 89 gctccattt ttaatcctct ttgtgttcac tactttatat tgaaagtatt cttaggctg 180
 91 attttttttt tccccctcc aacccttcag tcatacgcag tgaaaaaaagt catatgaatt 240
 93 aaatataaat aggcttcta ggctttaaaa attattaaat attcacagtt cctaagtcty 300
 95 gactcttct gtggcagcca ggcactactc agggaaagag atataaaaagt agctttaaaa 360
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 101 taaggacact tatttattaa aactcctttt ctttttccc aatgaaggct aataccctga 540
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 118 gagtcaataa atacaacaca ggagacatca cagaagactg ctgttagcct cccaatcccg 240
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 143 atagatagct gtagatataa gtatcagttc cagtaactcac atggcatttt tttcctgct 180
 145 tgctttgaa taaaaaccta cataatgaac acgataatat ggtaggattt gggcatgta 240
 147 attttccat ttagactttt ttcattcatt ttctgtatc tgatctcatg gtcttcttg 300
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162	caatttctct	tagtgccatc	ggtgtatgtt	acaaggcg	ggattgggc	gatccgactc	120
164	atcgagttat	tcaagaaaag	aggtggctca	gactcgctct	gcttcaccaa	ggatagaagg	180
166	ggagccggctt	aggaagggtt	taatttagct	gaaaatacaa	atggcaaaat	caaaggtaat	240
168	ttttccctc	ctgctgttaag	aaacccagtg	acatctgtga	ggtgggttga	ttcacatcar	300
170	gggaagctt	tgaaaaatgg	agatggcaat	taattgact	tcagaggatg	gtgacagtt	360
172	tttctaattgt	cttgatttcc	tatcaagaca	ttggccactt	ttctgcaggg	cctcaagaca	420
174	gtaatttagat	gtcatgtcgg	aatgtgactc	caaggctc	ggcgacacca	gttctaacta	480
176	gagccccccc	aaacacagga	tgagacaatc	agcttgccg	gccccgtc	ctgagagtca	540
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191	aaacactact	gtgaattact	gttggattgt	ggtgggtgt	gtgggtgcagg	aggaggagag	180
193	gagaggagac	cccttttaggg	aatgtgttg	gggttgagca	ttgagaacta	ggatgtttct	240
195	gtgtggatca	ggtttgc	gagatggatc	aatgactcag	gagtgtacac	agatccat	300
197	ctttgtaccc	tttagaaatt	aggctgatca	tcagcctc	cttgcac	cttgcacat	360
199	tttgttatca	acatgtgaa	ctgttgc	aatgtctgct	gatggat	tttcaactaa	420
201	tcttaaaatg	gtggatgtct	gtttaatttt	aaactggta	ccatgacatc	ccctgtgctg	480
203	aacattcaca	aacagctgga	cttagaagga	aatgtacaaa	tgttagtgc	ttc acagattact	540
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221	nnnnnnnnnnn	nnnnnnnnnnn	nnnnnnnnnnn	aatgtccagc	ctgtttaga	tccaccagaa	120
223	gtgttgaata	tatggactt	catgacgtt	cctaaacact	tggccttc	ctcaacatcc	180
225	taaacattt	cttgcattt	ttcttgcattt	gggattata	tttctgttgc	atacacccaa	240
227	gggaaggat	tcaggactgt	cctcaccac	ctctgtccat	ggctctttc	cacaaaaacr	300
229	cctattcc	ctaggtcatc	ctttgttca	ctgcctccc	tgtgttca	cccagtc	360
231	atggcaaggc	ctcccttca	ccagacttc	tccragaaat	cactmtggac	ccctcagccc	420
233	atcttctct	gcccattct	gaatacatct	gggacctgat	ttcatcttgc	ctgctgtct	480
235	ggttgtgtca	ttgataagtt	agctgacaaa	gacaaaatga	agtctaatac	aaaatgaacc	540
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250	ccacacgtct	cctctggttt	tgagaagaga	tctaattccag	gatctgactg	ctcatgctcc	180
252	atcctcattt	ggacattttc	tgagctgagg	tgtgagcaaa	gcatcagcta	aaacatgcac	240
254	cctgaggagc	aaatagaaaac	ctaggtgggg	ccccatccctc	cttgcattggc	tgcaggggr	300
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260	ctgcgtgtct	ctgagaccat	ttctctttt	cgtgaggagg	tgagggtcag	ggctatggtg	480
262	aggtgttcca	gagaagggtgg	gtttgcacac	acctggcact	tgtgctggc	agcagaggat	540
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	282	tgacaggtat	cattcagccg	ccctggcttg	tgaggggtgg	tataaatgaa	180
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	322	gaacagctct	gattctaatt	ataysgtaga	agaggtttc	gyggggccct	420
	324	ctagctacta	ccctcgmaaa	ttcaagtct	accacatcg	gaacgagggtg	480
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341	agcttaaatc	agaaaacccs	ttctttaata	cagagtgaga	agtggaatct	ctgcttagtg	180
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398	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	120
400	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnntctgta	ggttacattc	180
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410	tgtataattg	tattcctgct	actcaggata	tgttcagaaa	ataattacta	ttgaattaac	480
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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 Seq#:14; N Pos. 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
 Seq#:14; N Pos. 64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83
 Seq#:14; N Pos. 84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102
 Seq#:14; N Pos. 103,104,105,106,107,108,109,110,111,112,113,114,115,116,117
 Seq#:14; N Pos. 118,119,120,121,122,123,124,125,126,127,128,129,130,131,132
 Seq#:14; N Pos. 133,134,135,136,137,138,139,140,141,142,143,144,145,146,147
 Seq#:14; N Pos. 148,149,150,151,152,153,154,155,156,157,158,159,160,161,162
 Seq#:14; N Pos. 163
 Seq#:19; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
 Seq#:19; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
 Seq#:19; N Pos. 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
 Seq#:19; N Pos. 64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83
 Seq#:19; N Pos. 84,85,86,87
 Seq#:20; N Pos. 1
 Seq#:27; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
 Seq#:27; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
 Seq#:27; N Pos. 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
 Seq#:27; N Pos. 64,65,66,67,68,69,70
 Seq#:33; N Pos. 1,2,3
 Seq#:35; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
 Seq#:35; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
 Seq#:35; N Pos. 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
 Seq#:35; N Pos. 64,65,66,67,68,69,70,71,72,73,74,75
 Seq#:37; N Pos. 1,2
 Seq#:38; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
 Seq#:38; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
 Seq#:38; N Pos. 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
 Seq#:38; N Pos. 64

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/30/2005
PATENT APPLICATION: US/10/750,623 TIME: 09:51:21

Input Set : D:\MMI1100-1.txt
Output Set: N:\CRF4\08302005\J750623.raw

Seq#:44; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:44; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
Seq#:44; N Pos. 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
Seq#:44; N Pos. 64
Seq#:46; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:46; N Pos. 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
Seq#:46; N Pos. 44,45,46,47,48,49,50

VERIFICATION SUMMARY DATE: 08/30/2005
PATENT APPLICATION: US/10/750,623 TIME: 09:51:21

Input Set : D:\MMI1100-1.txt
Output Set: N:\CRF4\08302005\J750623.raw

L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11
L:396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14
L:536 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
M:341 Repeated in SeqNo=19
L:568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
M:341 Repeated in SeqNo=27
L:929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:988 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
M:341 Repeated in SeqNo=35
L:1047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:1081 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
M:341 Repeated in SeqNo=38
L:1246 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
M:341 Repeated in SeqNo=44
L:1305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:1418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:1560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0
M:341 Repeated in SeqNo=55
L:1727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:1867 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0
M:341 Repeated in SeqNo=66
L:2244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0
L:2276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0
L:2576 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:0
L:2880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:0
M:341 Repeated in SeqNo=103
L:2993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0
L:3160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:113 after pos.:0
L:4216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:152 after pos.:0
M:341 Repeated in SeqNo=152
L:4626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:167 after pos.:0
M:341 Repeated in SeqNo=167
L:4874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:176 after pos.:0
M:341 Repeated in SeqNo=176
L:5041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182 after pos.:0
M:341 Repeated in SeqNo=182
L:5073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183 after pos.:0
M:341 Repeated in SeqNo=183
L:5348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:193 after pos.:0
L:5679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:0
M:341 Repeated in SeqNo=205
L:5873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:212 after pos.:0

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/750,623

DATE: 08/30/2005

TIME: 09:51:21

Input Set : D:\MMI1100-1.txt

Output Set: N:\CRF4\08302005\J750623.raw

L:6202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:224 after pos.:0

L:6477 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:234 after pos.:0